

ABSTRACT

A long term stabilized magnesium hydroxide suspension which can be used for covering pellets of several materials in order to avoid the agglomeration of a plurality of pellets when stored or subjected to a heat treatment and which can be stored for at least three months without substantial agitation and without experiencing substantial settlement and solid hard substrate formation, comprising a solid content of about 51 % to 61 % by weight; a water content of about 39 % to 49 % by weight; a viscosity of about 500 to 1,500 cp.; an average particle size of about 1 to 2.5 microns; a $Mg(OH)_2$ content of about 50 % to 60 % by weight; an equivalent magnesium oxide content of 34 % to 42 % by weight; including ~~an adherent compound~~ a compound that improves the adhesion of the suspension to the pellets at a concentration of at least 30 % in an amount of 0.5 to 5 %, by weight, on a dry basis and an anionic polyelectrolyte as a dispersant agent, and which is obtained by washing, filtering and repulping magnesium hydroxide solids to obtain agglomerated solid particles, dispersing the agglomerated solid particles by comminution in a dispersing equipment, to reduce the particle size providing a dispersed product, grinding the dispersed product, to additionally reduce the particle size to about 2 microns; and adding ~~an adherent~~ a compound that improves the adhesion of the suspension to the pellets at a concentration of at least 30 % in an amount of 0.5 to 5 % on a dry basis and an anionic polyelectrolyte at a concentration of at least 25 %, in an amount of about 0.5 to 2.5 %, by weight, on a dry basis, as a dispersant agent.